

REPORT ON BOILERS.

No. 28430

Received at London Office 30 OCT. 1922

Date of writing Report 19 When handed in at Local Office - 2 OCT 1922 Port of **SUNDERLAND.**

No. in Survey held at **SUNDERLAND.** Date, First Survey Last Survey **Sep 26 19 22**

Reg. Book. on the **Miss Hansen No. 55205 S/S. PUNNELSTONE** (Number of Visits Gross Tons Net Tons

Master Built at **Bidford** By whom built **Miss Hansen & Co** When built **1922**

Engines made at **Sunderland** By whom made **Miss Macdon & Pollock (314)** When made **1922**

Boiler made at **Sunderland** By whom made **Miss Macdon & Pollock (322)** When made **1922**

Registered Horse Power Owners **Hansen Shipping Co.** Port belonging to **London**

MULTITUBULAR BOILERS — MAIN, ~~AUXILIARY OR DONKEY~~. — Manufacturers of Steel **Spencer & Sons**

(Letter for record **S**) Total Heating Surface of Boilers **SEE OTHER SHEET** Is forced draft fitted **NO** No. and Description of Boilers **SEE OTHER SHEET** Working Pressure **180 lb** Tested by hydraulic pressure to **360 lb** Date of test **18.9.22**

No. of Certificate **3817** Can each boiler be worked separately **Y** Area of fire grate in each boiler **SEE OTHER SHEET** No. and Description of safety valves to each boiler **SEE OTHER SHEET** Area of each valve **SEE OTHER SHEET** Pressure to which they are adjusted **-**

Are they fitted with easing gear **-** In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler **-**

Smallest distance between boilers or uptakes and bunkers or woodwork **-** Ex Mean dia. of boilers **11-0** Length **10-6**

Material of shell plates **S** Thickness **29/32** Range of tensile strength **28-32** Are the shell plates welded or flanged **NO**

Descrip. of riveting: cir. seams **lap d.t.** long. seams **d.p. 1 1/2 h. riv** Diameter of rivet holes in long. seams **1 1/2** Pitch of rivets **7 3/8**

Lap of plates or width of butt straps **15 1/4** Per centages of strength of longitudinal joint rivets **95-6** Working pressure of shell by rules **181** Size of manhole in shell **12 x 16** Size of compensating ring **28 x 26 x 32** plate **29/32** No. and Description of Furnaces in each boiler **2 Plain** Material **S** Outside diameter **38 1/2** Length of plain part top **6-4** Thickness of plates crown **23/32** bottom **5-9**

Description of longitudinal joint **welded** No. of strengthening rings **1** Working pressure of furnace by the rules **181** Combustion chamber plates: Material **S** Thickness: Sides **4 1/4** Back **3 1/2** Top **2 1/2** Bottom **2** Pitch of stays to ditto: Sides **8 1/4 x 9** Back **8 1/4 x 9 1/4**

Top **9 x 9** If stays are fitted with nuts or riveted heads **nuts** Working pressure by rules **181** Material of stays **S** Area at smallest part **1.73 sq in** Area supported by each stay **76.25** Working pressure by rules **182** End plates in steam space: Material **S** Thickness **3/32**

Pitch of stays **15 x 15** How are stays secured **d.n. & w.** Working pressure by rules **183** Material of stays **S** Area at smallest part **4.10**

Area supported by each stay **225** Working pressure by rules **187** Material of Front plates at bottom **S** Thickness **3/32** Material of Lower back plate **S** Thickness **3/32** Greatest pitch of stays **12 1/2** Working pressure of plate by rules **292** Diameter of tubes **3 1/4**

Pitch of tubes **4 3/8 x 4 3/8** Material of tube plates **S** Thickness: Front **3/32** Back **5/64** Mean pitch of stays **8 1/8 x 13 5/8** Pitch across wide water spaces **13 1/2** Working pressures by rules **184** Girders to Chamber tops: Material **S** Depth and thickness of girder at centre **7 3/8 x 1 1/8** Length as per rule **29 1/2** Distance apart **9"** Number and pitch of Stays in each **2, 9"**

Working pressure by rules **184** Steam dome: description of joint to shell **-** % of strength of joint **-**

Diameter **-** Thickness of shell plates **-** Material **-** Description of longitudinal joint **-** Diam. of rivet holes **-**

Pitch of rivets **-** Working pressure of shell by rules **-** Crown plates **-** Thickness **-** How stayed **-**

SUPERHEATER. Type **-** Date of Approval of Plan **-** Tested by Hydraulic Pressure to **-**

Date of Test **-** Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler **-**

Diameter of Safety Valve **-** Pressure to which each is adjusted **-** Is Easing Gear fitted **-**

MAGGOLL & POLLOCK
The foregoing is a correct description,
G. B. Pollock Manufacturer.

Dates of Survey **-** During progress of work in shops **-** **Please see Rpt of** Is the approved plan of boiler forwarded herewith **YES**

- 23 while building **-** During erection on board vessel **-** Total No. of visits **-**

GENERAL REMARKS (State quality of workmanship, opinions as to class, etc.) **NOTE: The two main boilers for this vessel are from different contracts, i.e. Nos 314 & 322. They are both the same diameter but of somewhat different design, and two reports are therefore forwarded in order that a correct record may be kept. These boilers have now been fitted & secured on board.**

Survey Fee ... £ **SEE OTHER SHEET** When applied for, 19.....

Travelling Expenses (if any) £ **SHEET RPT 4** When received, 19.....

Committee's Minute **FRI. JAN. 19 1923** **W. H. Stalk & John W. Gwynne** Engineer Surveyor to Lloyd's Register of Shipping.

Assigned **see minutes on J.B.**